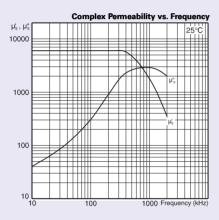
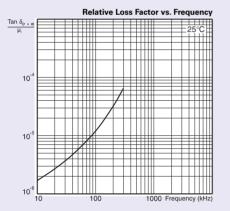
## **F10**

Material Type:	Manganese-Zinc Ferrite
Properties:	High permeability.
Frequency range:	Depends on application
Typical Applications:	Wideband, Pulse Transformers and Filter applications.
Available core shapes:	Ring, E, EP, RM & Pot Cores.

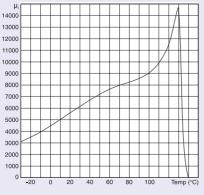
## **Material Specification**

Parameter	Symbol	Standard Conditions of test		Unit	F10
Initial Permeability (nominal)	-	B<0.1mT 10kHz	25°C	-	<b>6000</b> ±20%
Saturation Flux Density (typical)	B <sub>sat</sub>	H=796 A/m = 10 Oe	25°C	mT	380
Remanent Flux Density <i>(typical)</i>	B <sub>r</sub>	H→ 0 (from near Saturat 10kHz	tion) 25°C	mT	200
Coercivity (typical)	H <sub>c</sub>	B→ 0 (from near Saturat 10kHz	ion) 25°C	A/m	16
Loss Factor (maximum)	$\frac{\tan \delta_{(r+e)}}{\mu_i}$	B<0.10mT 10kHz	25°C	10-6	-
Curie Temperature (minimum)	Θ <sub>C</sub>	B<0.10mT	10kHz	°C	130
Temperature Factor	$\frac{\Delta\mu}{\mu_i^{2}.\Delta T}$	+25°C to +55°C B<0.10mT	10kHz	°C	-1 to +2
Resistivity (typical)	ρ		1 V/cm 25°C	ohm- cm	50





Initial Permeability vs. Temperature



## Dynamic Magnetisation: Typical B-H Loops

